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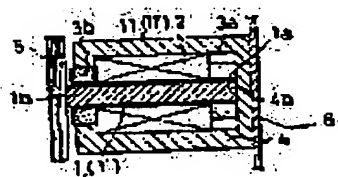
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(54) SPEAKER EMPLOYING ULTRA MAGNETOSTRICTIVE VIBRATOR

(57)Abstract:

PURPOSE: To realize the vibrator driver employing the ultra magnetostrictive vibrator in which a permanent magnet being a magnetic source of applied magnetic field, a voice coil of a drive source and one terminal of the ultra magnetostrictive vibrator are all fixed to a housing and a tip of the ultra magnetostrictive vibrator at a free end is directly coupled and fixed to a body to be vibrated.



CONSTITUTION: The speaker employs an ultra magnetostrictive vibrator 1 in which magnetic sources 3a, 3b applying a static magnetic field in the axial direction and the vertical direction to the axis of the long ultra magnetostrictive

vibrator 1 are provided, a voice coil 2 acting dynamic magnetic field in the lengthwise axis direction of the said ultra magnetostrictive vibrator 1 is wound therearound fixedly, a base 1a is fixed to an inner bottom 4b of a housing 4, and fitted while being suspended to a frame 6 and a free tip end 1b of the above ultra magnetostrictive vibrator 1 is fixed and fitted to the middle of a diaphragm 5 supported by a concentric

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support fixed to the frame 6.

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